

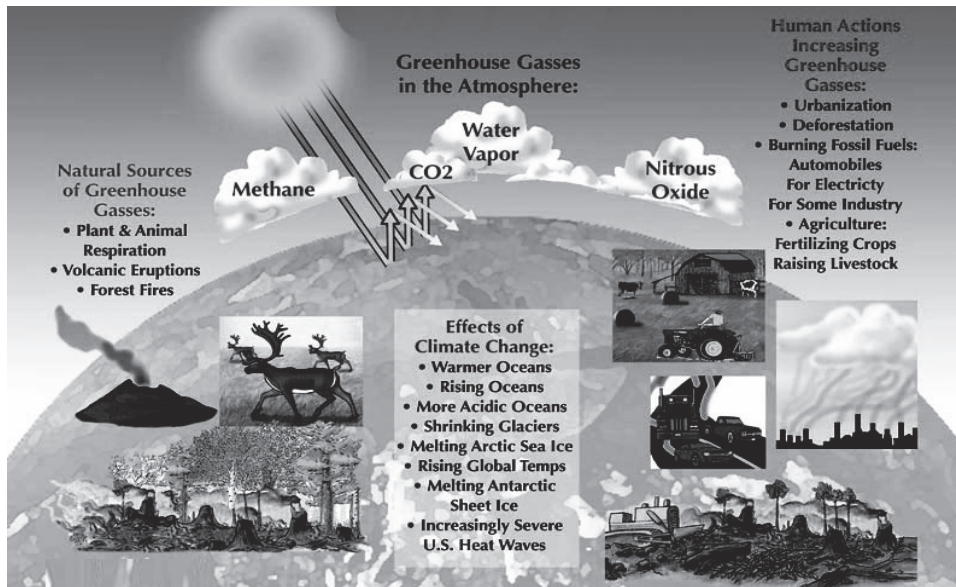
RESEARCH NOTES

CLIMATE CHANGE IMPACTS; DISASTERS AND CONFLICTS

Samina KHALIL*

I. Introduction

Climate change is an emerging threat for our planet. It has manifested in disasters of unpredictable frequency and intensity in different parts of the world. The climate plays such a major role in our planet's environmental system that even minor changes have impacts that are large and complex. Climate change affects people and nature in countless ways. It often increases existing threats that have



Source: Wikipedia.

FIGURE 1
Climate Change

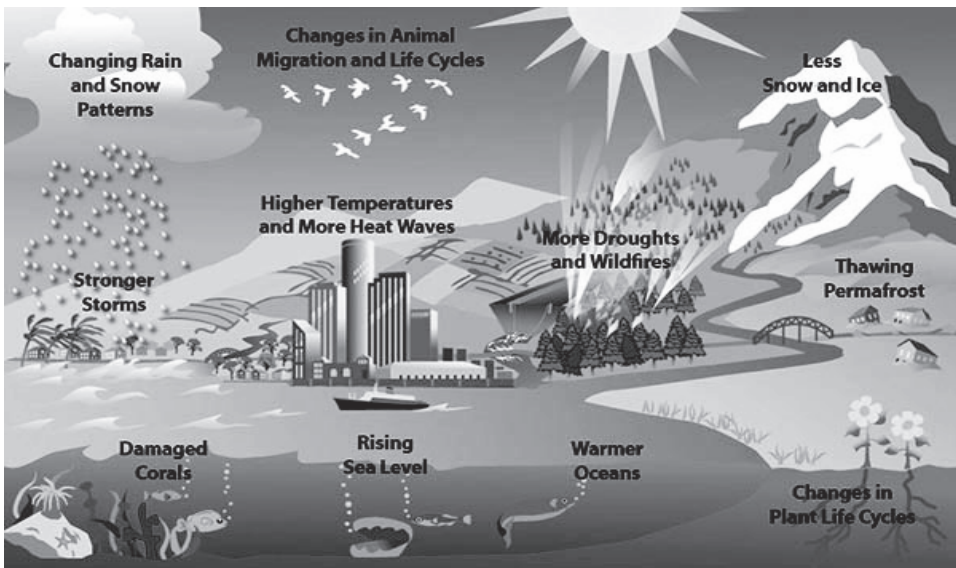
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already put pressure on the environment. But it is not a problem which has appeared overnight – its 30 years since scientists first alerted the world to the dangers of climate change. Changes in nature have serious implications for people and our economic system. The insurance industry estimates the potential economic damage, caused by the impacts of global warming, to be hundreds of billions of dollars each year.

II. Climate Change Impacts

Inter Governmental Panel on Climate Change (IPCC) has confirmed that the climate of the Earth has undergone a significant change over the last 150 years. The most significant manifestation of this change is the Global Warming i.e., rise in temperature of Earth. According to them, 1990 was the warmest decade and 2005 the warmest year on record since 1860. As a consequence, glaciers are melting and retreating, sea levels are rising, more frequent storms and extreme weather events are taking place. There is broad consensus by scientists that this change is a consequence of human activities, primarily burning of fossil fuels.

Pakistan has a number of environmental impacts and concerns, such as deforestation, soil erosion, desertification, and limited fresh water resources. Pakistan is also located in a region prone to severe earthquakes in the north and the northwest.



Source: Wikipedia.

FIGURE 2

Climate Change Impact

The type of environmental problem is susceptibility to flooding during monsoon seasons. Climate change has worsened the monsoon season which regularly affects the South Asia. Inter-governmental Panel on Climate Change studies show that because of climate change, mega-delta regions in South Asia are at increased risk of flooding, as well as the increased frequency and intensification of rainfall and winds Intergovernmental Panel on Climate Change [IPCC, (2007)].

III. Progression of Indus River Flooding

Perhaps the issue of flooding is not found anywhere in the world, than in the South Asia. Aside from floods in Pakistan, consider the ramifications of years of flooding due to the rapid melting of glaciers in the Himalayas. Those mountains are a primary source of water for people in Nepal, India, China, Pakistan, and Bangladesh; flooding damages crops, carries water-borne disease, and forces migration. If the glaciers melt completely, the region's rivers will experience considerably lower flow and could see a far worse fate: that is 'desertification'. The Indus River is particularly critical: Though it's longest river of Pakistan but it flows from the Himalayas and then through India, before reaching Pakistan. Pakistan was guaranteed its share of water by the Indus River Treaty, but however, India still controls its water flow. In addition to this tension, the risk of rising sea levels force the migration of millions of people living along the coastal regions of Pakistan, India, and Bangladesh; make the picture turns even darker.

Pakistan is highly vulnerable to disasters caused by Climate Change, especially prone to floods and droughts. Sandstorms, dust storms, micro-cloudbursts, cyclones and tsunamis are additional threats. In recent years we have witnessed several extreme events, resulting in major loss of life and property causing chaos and destruction in several hot spots. Cyclone in 2007 had a wide impact on 26 districts of Balochistan and Sindh; and affected 2.5 million people and caused the loss of nearly 400 lives.

The highlands are particularly vulnerable to Glacier Lake Outburst Floods (GLOF). We in Pakistan, have 5,218 glaciers and 2,420 lakes, of which 50 are highly dangerous and may cause flooding in the plains of Punjab and Sindh. The highly vulnerable Indus delta faces hazards from sea intrusion and sea rise.

Pakistan is facing multitude of impacts ensuing from climate change phenomenon, the Super Floods of 2010 and the cyclones of 1999 and 2007 which are grim reminders of the fact that we are negotiating a serious challenge posed by climate. The summer 2010 floods in Pakistan are considered the worst in 80 years. The increased precipitation of the monsoon season flooded the Indus. The progression of the swelling of Indus can be seen in Figures 3(a), 3(b) and 3(c). It shows that within three months, the Indus and its tributaries flooded, affected most of the country. The flooding began in the north of the country, proceeding to the southern and eastern parts.

IV. Moderately Affected Districts/Severely Affected Districts

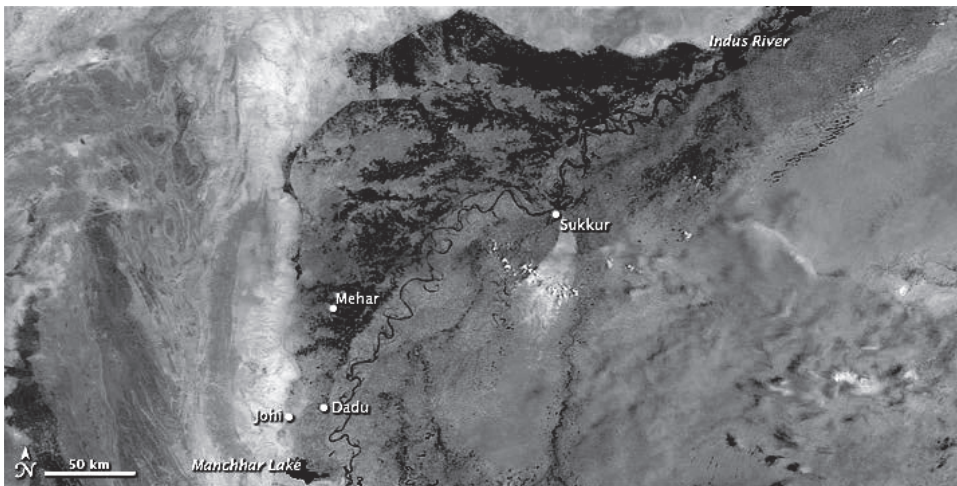
The floods affected most of the country. Figure 4 depicts a map of the affected districts and the degree of severity. As seen, the districts neighboring the Indus have been hardest hit. The figure shows that the floods severely affected the districts of the KPK (former N.W.F.P in 2010) province, which is the site of a revolt against the government. The eastern part of Baluchistan was also severely affected.

V. Potential Threats for Pakistan

These are also indicators of climate change in one way or another. A higher concentration of CO₂ in the atmosphere leads to arise in temperature, which impacts precipitation and moisture, etc.

Plant science tells us that CO₂ is an essential component for plant growth and photosynthesis. On the basis of this, some researchers have predicted that productivity of agriculture will increase in the coming year. However, higher temperature will be a hindrance and an excessive amount of CO₂ will impact productivity in a negative way.

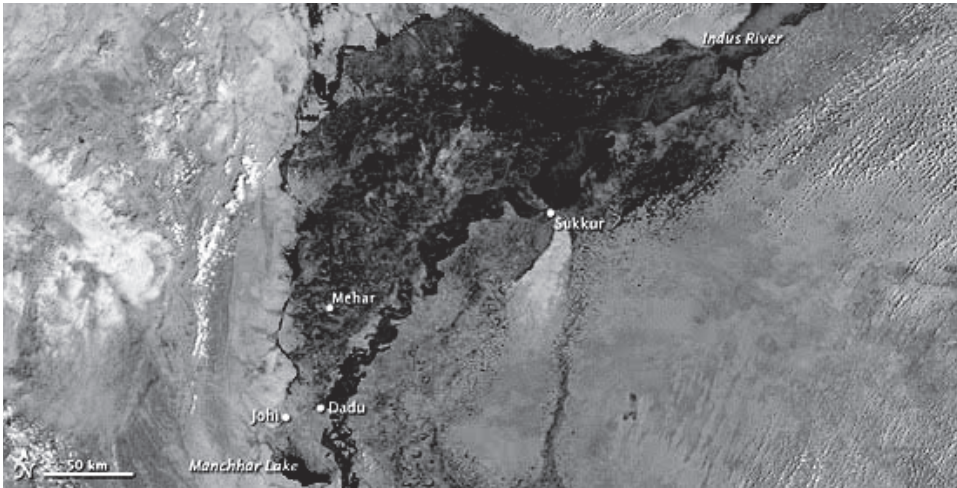
Moreover, the rise in temperature will not have similar impacts in all places. Countries with a higher altitude will benefit from it, as the productivity of crops will increase in those areas, but productivity will start to decline after the 3°C increase in temperature. On the other hand, lower altitude countries will suffer losses



Source: NASA Earth Observatory, 19 July 2010.

FIGURE 3(a)

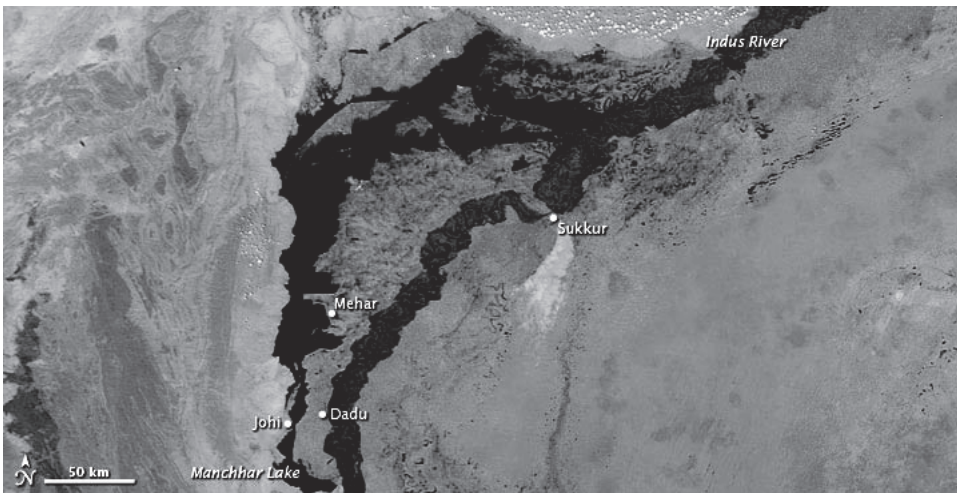
Progression of Indus River Flooding



Source: NASA Earth Observatory, 11 August 2010.

FIGURE 3(b)

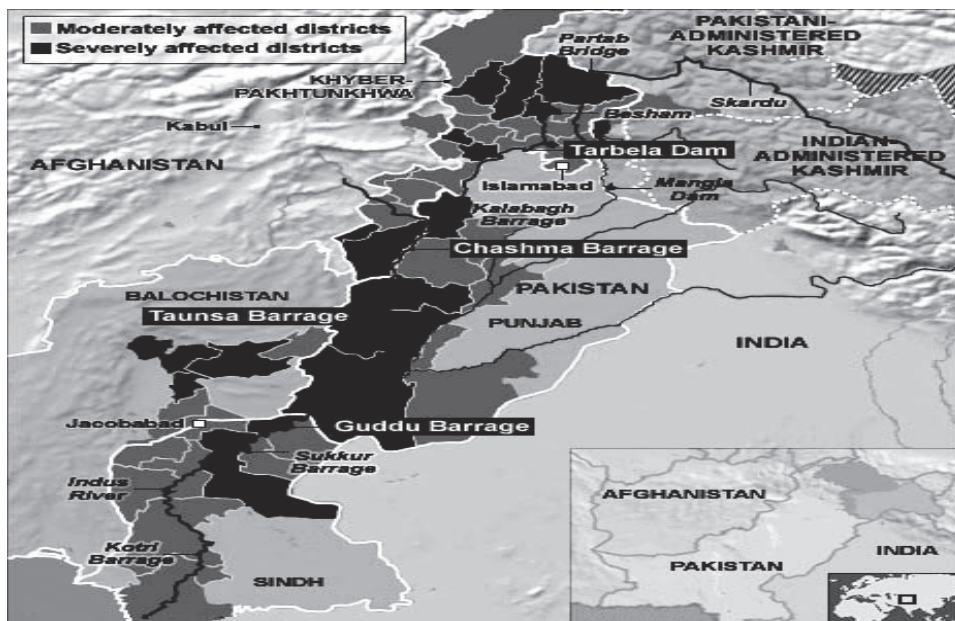
Progression of Indus River Flooding



Source: NASA Earth Observatory, 7 September 2010.

FIGURE 3(c)

Progression of Indus River Flooding



Source: OCHA, 16 August.

FIGURE 4
Districts Affected by Floods

TABLE 1
Wheat Yields in Different Agro-Climatic Zones of Pakistan

Region	% Share in National Production	Baseline Yield (kg ha ⁻¹)	% Change in yield in 2085	
			A2 Scenario	B2 Scenario
Northern Mountainous	2	2658	+50	+40
Northern Sub-mountainous	9	3933	-11	-11
Southern Semi-arid Plains	42	4306	-8	-8
Southern Arid Plains	47	4490	-5	-6
Pakistan	100	4326	-5.7	-6.4

Source: Global Change Impact Study Centre, 2010.

in productivity even at 1°C increase in temperature [FAO (2008)]. Pakistan is not only amongst the latter, but is also located in a semi-arid to hyper-arid region - meaning that the increase in temperature will be higher as compared to the rest of the world, reducing the productivity and yield of crops.

The impacts of climate change will worsen the existing poor state of the agriculture sector which has suffered from a number of shortcomings, from the highest level i.e., policy making to the grass roots level in Pakistan. Prior to the independence, Punjab was known as the 'food basket' of the sub-continent. However, after partition the pace could not be maintained and now we are witnessing sharp decreases in food production; due to numerous reasons e.g., governance, market failures, skewedness of land, etc. The Green Revolution in 1960 gave a boost to agriculture from 1960 by introduction of high yielding crops, chemical inputs and modern technology. Pakistan continued to reap the benefits of Green Revolution but growth rate of productivity is decreasing every year because of the lack of interest of the government. The status of land degradation in Pakistan is already at alarm, and with climate change, the situation is steadily deteriorating. Fertile land will become non-productive or suffer reduced productivity.

VI. Food Insecurity

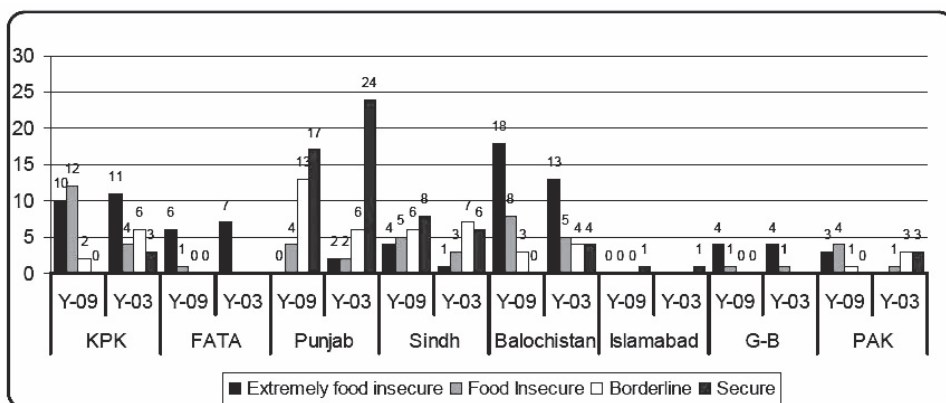
It is a well-established fact that agriculture is the main source of livelihood and employment in Pakistan. Owing to the negative effects of climate change, people will lose their earning sources in the agriculture sector which will have two categories of impacts: food insecurity and the migration of people. The former will cause an immediate conflict and struggle between people. As we witnessed in 2007-08, in certain parts of the world, riots out broke due to higher price of food and its non-availability, e.g., in Philippines, Egypt, Haiti, India and Vietnam [The Financial Times, (2008)].

TABLE 2

Status of Land Degradation in Pakistan

Water Erosion	17%
Wind Erosion	8%
Salinity and Sodicty	9%
Water Logging	5%
Low Organic Matter, less than 1	96%

Source: Global Change Impact Study Centre, 2010.



Source: Food Insecurity in Pakistan, SDPI 2009.

FIGURE 5

Food Insecurity in Pakistan

Pakistan is already going through a very severe food insecurity crisis. SDPI conducted a study in 2010, which indicates that food insecurity is increasing in Pakistan. According to the study, about 48.7% of the population is food insecure and the 2010 floods have added the numbers to this category. Future floods will further complicate the situation. SDPI's study also tried to find the link between food security and peace, but concluded that although there is no empirical evidence available to establish the link between food security and peace, the most food insecure areas are also the most disturbed areas in Pakistan, e.g., North, South Waziristan, Dera Bugti, etc.

VII. Assessment of Costs Faced by Pakistan after Flood of 2010

The World Bank and the Asian Development Bank Assessment Report stated that Pakistan faced costs worth almost 10 million US dollars as shown here [World Bank and ADB (2010)]. However, these assessments did not include the livelihood cost of people, which would automatically increase the cost.

VIII Environment: Conflict Link and Dynamics

Now considering the Environment – Conflict Link and Dynamics, apart from the cost of damages, there is another dimension which we need to consider. The security dimension was missing from all the assessments made by the Government of Pakistan. But a case study by ICE identify the loss of livelihood opportunities,

TABLE 3
History of Disasters in Pakistan

Disaster	Location	Date	Affected	Death Toll
Earthquake/Tsunami	Makran	325 BCE		
Earthquake	Quetta	31-May-35		60,000
Earthquake/Tsunami	Makran	27-Nov-45		4,000
Flood		1950		2,900
Wind Storm		15-Dec-65		10,000
Flood		Aug-73	4,800,000	
Earthquake	Northern Areas	28-Dec-74	97,000	5,300
Flood		2-Aug-76	5,566,000	
Flood		Jun-77	1,022,000	10,354
Flood		Jul-78	2,246,000	
Flood		Aug-88	1,000,000	
Extreme Temperature		11-Jun-91		961
Flood		9-Aug-92	6,184,418	
Flood		Sep-92	12,324,024	1,334
Wind Storm		14-Nov-93		609
Flood		22-Jul-95	1,255,000	
Flood		24-Aug-96	1,186,131	
Flood		3-Mar-98		1,000
Drought		Mar-2000	2,200,000	
Earthquake	Muzaffarabad	8-Oct-2005	2.5 million	78,000
Flood		Jul/Aug-2010	20,000,000	

Source: NDMA 2011.

houses, basic services, food and so on which inevitably lead to social unrest - even violence and can ignite riots and conflicts in the short term. Crimes, e.g., increase in robberies reflected by some media reports highlighted these crimes. This can eventually lead to severe controversy, especially due to migration and limited resources and can threaten national peace and security. During the floods, the government had to move a large number of troops for rescue and relief efforts in all provinces of the country. Moreover, there exists deep concern regarding river flows and intra-state and inter-state issues.

Pakistan's rivers flow from India, a country with which there is a long history of bitter relations. Since inception of the country, Pakistan-India relations have never been smooth, but fraught with problems, including water conflicts – a severe bone of contention between the two countries. In 1960, Pakistan and India signed the Indus Water Treaty. The Indus Water Treaty (IWT) aided both countries in easing tensions over water issues. The IWT granted the right of water flow into Indus, Jhelum and Chenab rivers of Pakistan. Yet once again, problems have started to surface, compelling Pakistan to ask for support from the World Bank to intervene and appoint a neutral ex-parte. Resultantly India has begun the construction of dams on Indus, Jhelum and Chenab rivers. In its 12th five-year plan, India clearly showed intentions to invest in hydro-electricity along these three rivers.

TABLE 4

Assessment of Costs Faced by Pakistan after 2010 Flood

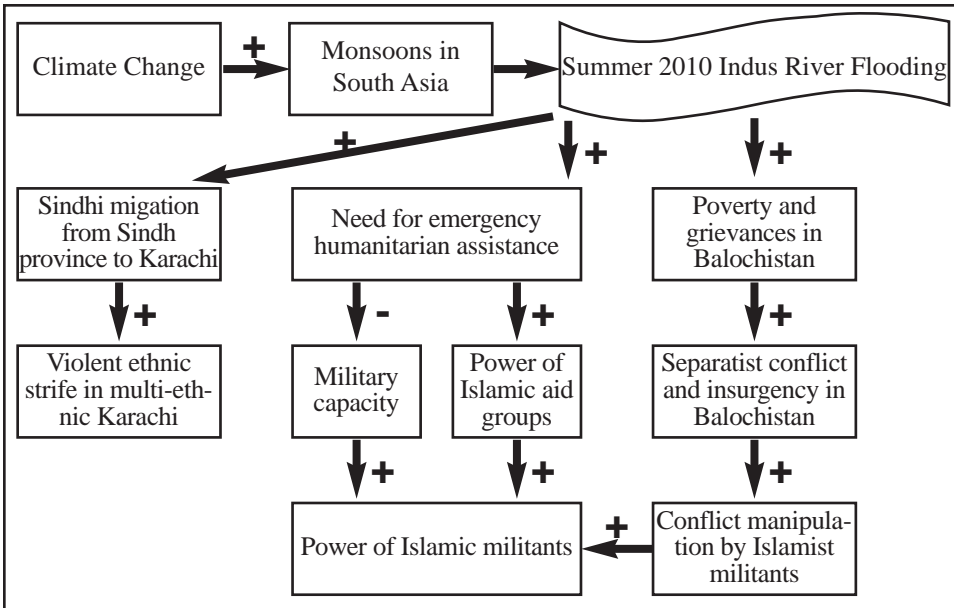
Province/ Region	Damage Costs		Reconstruction Option 1		Reconstruction Option 2		Reconstruction Option 3	
	PKR millions	USD millions	PKR millions	USD millions	PKR millions	USD millions	PKR millions	USD millions
AJK	7,303	86	13,190	155	13,886	163	16,009	188
Balochistan	52,676	620	27,258	321	34,359	404	58,116	684
FATA	6,271	74	7,595	89	7,873	93	9,544	112
Gilgit-Baltistan	4,165	49	6,627	78	6,893	81	10,027	118
KPK	99,625	1,172	105,957	1,247	109,942	1,293	179,844	2,116
Punjab	219,272	2,580	93,521	1,100	107,903	1,269	117,650	1,384
Sindh	372,341	4,380	227,850	2,681	253,791	2,986	269,704	3,173
Federal/Cross Cutting Sector	93,117	1,095	95,911	1,128	95,911	1,128	96,866	1,140
National Total	854,771	10,056	577,908	6,799	630,556	7,418	757,760	8,915

Source: World Bank and ADB, 2010, and ICE Case Studies.

Pakistan has attempted to solve the issue at bilateral level, and then registered serious concern by seeking the World Bank’s mediation as mentioned above. India is not willing to accept the claim that Pakistan’s water is blocked, and blames the latter for mismanagement of water resources.

While both countries have previously ignored the climate change and its impact on the river flow, India now uses this argument in its favor. In the case of Baglihar, India justify the design of the dam on the basis of environmental degradation. However, when taking into account the larger picture, it is clear that the main cause for this degradation in Kashmir is military intervention from India. The Indian army had cleared large forest areas during this war.

There is an urgent need to understand and fully comprehend the dimensions of climate change and its implications on water availability in future. In the 21st century, climate change will deplete water resources and the population of this region will increase, enhancing the demand for water. This will increase competition between Pakistan and India over scarce resources. It will in all certainty lead to a greater divergence between the two countries and possibly a war over water. Water availability will also impact relations between the provinces of Pakistan. Water issues are already causing fractures between the provinces, and in future, limited availability of water will further enhance.



Source: ICE Case Study.

FIGURE 6

Now, the climate change has induced floods and exacerbated conflicts of three different types. In the first type boxes, it is depicted that the need for humanitarian assistance decreased military capacity and increased the power of aid groups which are extremists, referred here. These two factors increased power of the so called militants; thus prolonging the counter terror conflict in Pakistan. Some aid groups are separate wings of militant organizations; hence the two can be conceptually separated. In the second types boxes, the case is that of flooding of Sindh province increased Sindhi migration into multi-ethnic Karachi leading to ethnic strife. In the third type, the flooding has increased poverty in Balochistan. This is causing heightened tension with federal government due to increased grievances. Experts fear that extremist militants can manipulate and exploit the latter two situations.

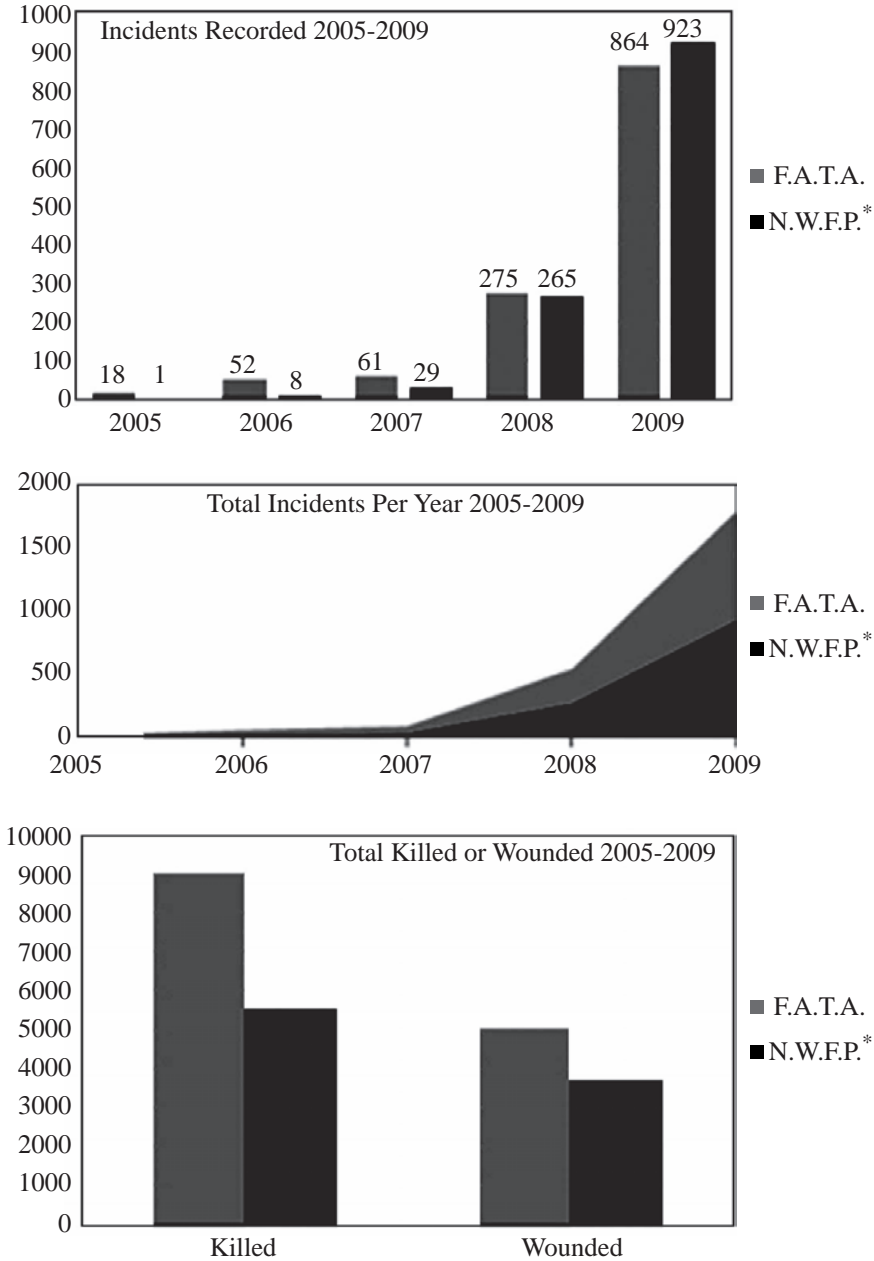
Balochistan is thought to be susceptible to extremist manipulation, which ties the conflict to global counterterrorism efforts. It is Pakistan's largest province but contains only 5% of the population; 45% of this population lives below the poverty line. Because the region shares a long border with Afghanistan, the Taliban are supposed to have safe haven in Balochistan, especially in northern Balochistan. The two main aspects of the conflict are the strength of the Taliban in the region, and the unaddressed grievances of the separatists, which are exploited by the Taliban.

IX. Type of Conflict – Intra State

The level of conflict significantly increased in 2008, in both the Federally Administered Tribal Areas and the North West Frontier Province. Between 2005 and 2009, almost 9,000 people were killed and 5,000 wounded; these include military and civilian deaths. The most recent government offensive resulted in the displacement of approximately 2 million people. The types of methods used in the conflict include air strikes, drone attacks, ground based attacks, explosives, suicide attacks, executions, kidnapping, arrests, and other insurgent violence, such as destruction of schools [Amnesty International (2010)].

As mentioned earlier both floods and droughts impact the productivity of agriculture and livestock. Thus, productivity and production of the sector will decrease. As IPCC predicted, in Asia productivity of agriculture will decrease by 2.5 to 10 per cent by 2030. Lower production and productivity of food crops will rapidly diminish food availability. Lower availability of food alone as an indicator of food security, keeping all other indicators constant, is a terrifying prospect. There will be less food available for the increased population which will give rise to clashes and violence among communities.

Food insecurity alone will shake the country. The food crises of 2008 led to riots that spread across many countries including Pakistan; many people lost lives in Karachi during the distribution of flour. Food insecurity also breeds other types of insecurities. Although there is no empirical evidence available but the SDPI Food



Source: ICE Case Studies, * former name of KPK province.

Incident: Observation of security and/or insurgency-related incident as reported in publically available sources.

FIGURE 7
Counter Terrorism in Frontier Region

Insecurity 2003 and 2009 reports indicate that most food insecure districts of Pakistan e.g., North Waziristan, South Waziristan, Kohlo, Dera Bugti, etc., are the hub of conflicts and extremism.

Pakistan has to engage a large number of arm forces and its immense resources to handle the situation in these areas. This connection shows that there is indeed a link between food insecurity and violence. In spite of these clear evidences we have not invested much on building the capability and capacity of national institutes to cater the challenge of climate change related disasters and its impacts on national security.

Unfortunately, the capability and capacity of the Government of Pakistan to tackle climate change related disasters is very limited. Although Pakistan created NDMA, its capacity and capability is very limited. The floods of 2010, 2011 and Atta Abad Lake incidents exposed the incapability and incapacity of NDMA and other disaster related institutes. Right from inception of Pakistan, the Pakistan Army has been the only reliable institution to cope with the challenge of disasters. In 2010 and 2011 the Army was the main institute that could rescue and provide relief to people. The main reason for this is the incapability of other institutes like NDMA, Flood Commission of Pakistan, etc. These institutions could not flourish due to lack of investment in human capital and non-availability of required financial resources. Although it is not desirable to engage the military in relief activities Pakistan has no other option. Army is the only well organized and functional institute which can deliver on time and with efficiency. A weak governance system and corruption weakens the capability of civil institutes to deliver the desired results. If the army is involved it will have to compromise on other fronts e.g., war on terror. Furthermore, the army can only intervene at the time of a disaster- not in the process of preparedness. Therefore, the government should develop civil institutes, so that the impact of disasters can be minimized. The government should create more institutes to ensure food security despite the un-predictability of climate change else it would be extremely difficult to control the situation and it may lead to conflicts and instability in the country as discussed earlier.

In addition, the government must plan according to the future needs and take some innovative steps to tackle climate change. We should not wait for consensus at the international level. In the absence of accurate and efficient policies, we will not be able to tackle climate change. Climate change is uncertain and uncertainty requires preemptive steps to control and minimize the loss.

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Bibliography

- Amnesty International, 2010, Eyes on Pakistan: Human Rights abuses in North-Western Pakistan, <http://www.eyesonpakistan.org/satellite.html>, (accessed December 4, 2010).
- Central Intelligence Agency, 2010, The World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html>, (accessed December 4, 2010).
- Congressional Research Service, 2010, Security and the Environment in Pakistan, CRS report for Congress, http://www.voltairenet.org/IMG/pdf/Security_and_the_Environment_in_Pakistan.pdf (accessed September 22, 2010).
- Gayer, Laurent, 2007, Guns, Slums, and Yellow Devils: A genealogy of urban conflicts in Karachi, Pakistan, *Modern Asian Studies*, 41(3): 515-544.
- Helmer, Madeleen, and Dorothea Hilhorst, 2006, Natural Disasters and Climate Change, *Disasters* 30(1): 1-4.
- Intergovernmental Panel on Climate Change, Regional climate projections, 2007, <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-chapter11.pdf>, (accessed September 21, 2010).
- Maps of World: Pakistan Administrative Map (figure 2), <http://www.mapsofworld.com/pakistan/pakistan-political-map.html>.
- Masood, Salman, and Huma Imtiaz, 2010, Political bloodshed paralyzes Karachi, *New York Times*. <http://www.nytimes.com/2010/10/21/world/asia/21pstan.html> (Accessed December 6, 2010).
- Mullen, Rani, 2009, Balochistan: AF-PAK's forgotten Frontier, <http://www.sais-jhu.edu/bin/e/j/Rabeah%20Sabri%20Balochistan.pdf>, (accessed December 5, 2010).
- NASA Earth Observatory: Progression of Indus river flooding, (figure 3). <http://earthobservatory.nasa.gov/NaturalHazards/event.php?id=44986>.
- New York Times, 2010 Pakistan floods, (September 7, 2010), http://topics.nytimes.com/top/reference/timestopics/subjects/f/floods/2010_pakistan_floods/index.html?scp=1-spot&sq=Pakistan%20floods&st=cse, (accessed September 21, 2010).
- Peters, Gretchen, 2010, Crime and insurgency in the tribal areas of Afghanistan and Pakistan, *Combating Terrorism Center at West Point*, (October).
- Smith, Paul J., 2007, Climate change, Weak states, and the war on terrorism in South and Southeast Asia, *Contemporary Southeast Asia: A Journal of International and Strategic Affairs*, 29(2): 264-285.
- The Economist, 2010, After the deluge; Pakistan, *The Economist*, 396(8700).
- The Express Tribune, 2010, Needs of Balochistan victims, daily Unmet: UNHCR, <http://tribune.com.pk/story/45140/needs-of-balochistan-flood-victims-unmet-unhcr/>, (accessed December 5, 2010).

- UN-HABITAT, 2010, Rapid assessment of flood affected areas in Balochistan, <http://www.unhabitat.org.pk/newweb/Latest%20Reports/Baluchistan/ConsolidatedReportFloodBalochistan05August%202010.pdf>, (accessed December 5, 2010).
- Unrepresented nations and peoples organization, 2009, Balochistan: Human Rights Organizations, Discussed at HRC. <http://www.unpo.org/article/10104> (Accessed December 5, 2010).
- White, Joshua T., 2008, Pakistan's Islamist frontier: Islamic politics and U.S. policy in Pakistan's north-west frontier, Religion and security monograph series No.1: 1-162.
- Wright, Tomm, Crush of refugees inflames Karachi, Wall Street Journal,. (August 26, 2010). <http://online.wsj.com/article/SB10001424052748704540904575451512217585010.html>, (accessed September 21, 2010).

FINANCIAL INCLUSION FOR ECONOMIC GROWTH

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At present it is estimated that one-third of the world's population, majority poor, are without basic financial services, such as, savings, insurance, credit, as stated by Queen Maxima of the Netherlands, Secretary General Special Advocate for Inclusive Finance for Development in the United Nations. She is the leading Global Spokeswoman for the essential role of financial services in eradicating poverty, fostering equitable economic growth and addressing diverse development goals, which include food security, clean water, good health, universal education and environment sustainability.

Inclusive Finance is a newly emerged concept, the methods adopted to eradicate poverty and to help poor individuals in order to improve their living standards. It is a basket of financial products and services that are accessible to low-income population of the country. Financial inclusion helps families and entrepreneurs to generate income, manage cash flows, and invest the opportunities in building assets. It includes the variety of banking services and products which are available to the poor, less privileged population, especially in rural areas. These services and products help them in saving for future needs, rainy days, finance their activities and support their families back home to the rural and remote areas by transferring money via banking services.

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In order to fulfill these requirements various actors play their role in the process. Mostly used services are microloans, money transfers, saving products among others through financial institutions, banks, including microfinance banks; the most commonly used service is the microloan. These small loans as the name depicts are given to poor individuals in order to start income generating activity to help them in improving their living condition. These borrowers are so poor that they are unable to provide collateral for loan repayment. For this purpose it is essential to develop some criteria and regulations on which inclusive finance institutions have taken initiation.

When microfinance was initiated it was expected to be the perfect substitute of informal finance; and though it proved to be a very successful program in many developing countries, but due to the procedures followed by the microfinance institutions, some of the institutions operating this program also remained dependent on informal finance.

Secondly, when these programs fail to reach all poor then the benefits of the plan do not have real impact on the targeted population, and the success may only be partial. In many cases the microfinance loan repayment schemes are in tightly fixed installments. Sometimes, for such repayments the loaners have to depend on informal money lenders. In such cases women clients were targeted more. It is observed that in such a situation where intense pressure for recovery of loan on women creates domestic tension between the spouses- thus it lose cooperation.

In spite of financial sector reforms that took place from time to time and were successful, it is noted that even less than 5 per cent of the poor had access to microfinance services which is very low as compared to the neighboring countries. It is the lowest among the SAARC countries - the highest is the Bangladesh, (35 per cent).

In the wake of achieving the target of Millennium Development Goal (MDG) during 2007-08, to eradicate poverty by halving (50 per cent) by the year 2015, the Government of Pakistan, among other nations, took various measures. In this regard the attempt was made to adopt the then newly emerged concept of Inclusive Finance. The Significance and importance of financial intermediaries was known, since long, but the outreach of these financial institutions was limited only to urban and peri-urban areas. There were no such services available in the rural part of the country.

It is an after recognizing - the fact that the Government and the State Bank of Pakistan joined hands to make it possible to provide appropriate and affordable services to the poor and assure its sustainability. To bring the financially 'excluded' into the financially 'inclusive' population, it is a big task; but at macro-level it is essential as it will help to generate savings and hence, investment will ultimately lead to economic growth. In Pakistan 60 per cent of the population live in rural areas having none or very little financial banking services. In both, urban and rural

areas, people generally prefer on cash dealings. Recognizing the fact, the SBP explored the possibilities to minimize this attitude and encourage the electronic payment system through branchless banking regulations. Thus, easy paisa and mobi-cash came into practice. These are basically the result of mobile technology which provided new branchless banking services to people with no bank facilities or accounts in easy, safe and minimum time. This is one way of financial inclusion.

The last two decades experienced microfinance and accepted it globally as poverty alleviation development strategy. One of which was introduced in Bangladesh by, a Nobel Laureate at small-scale for village women of rural areas. The idea of micro-credit is to enable poor individuals who wish to start their own (small) business activity and be self-employed. Generally, loans are provided to both the individuals and the groups of people. The model of Grameen Bank is one of the success stories which have been later replicated by many other countries. In spite of its success half of the poor population still depend on money lenders. With the passage of time the outreach of bank services also increased; though, there are many reasons probably one of the major one may be the complicated procedures which the financial institutions have to follow. Rural poor are also hesitant to adopt banking services due to high transaction cost and the time consuming procedures.

Waiting in line, visits to bank and sometime failure of system are major disadvantages of formal banking services to the poor. These negative externalities provide the reason for money lenders popularity, though it is much more expensive but less time consuming as compare to formal banking services.

The goal and objective of initiating the inclusive finance program is to achieve or at least improve the inclusive economic growth; so that opportunities to enhance income for poor and the marginalized population of the country may be improved. Hence, to enhance the access of financial service, the focus of financial inclusive program should be enhanced for poor and marginalized groups of small entrepreneurs in Pakistan.

In February 2015, the Governor, State Bank of Pakistan addressed the Second International Conference on Economic and Finance in Kathmandu, Nepal, titled "Promoting Equitable Economic Growth through Inclusive Finance", and stated that with strong commitment of the government of Pakistan, the SBP's strategic vision sound legal and regulatory foundations, robust market infrastructure, technological and institutional innovations, and private sector dynamism, the trajectory of microfinance is set for achieving the long-term vision of "financial inclusion for all" citizen of Pakistan. During the period of globalization the need for regional economic and financial cooperation among the South-Asian countries is even more. He hoped that the common challenges faced by the South Asian countries would strengthen regional cooperation to help-sustain future downside risks transmitting from the advanced economies. He also mentioned that among the population of 1.7 billion people, majority is youth.

The SBP played a positive role in promoting an inclusive financial sector in the country. In fact, Pakistan is the first country among the South-Asian countries which issued a Microfinance Law (Microfinance Institutions Ordinance, 2001). This paved the way for creation of second tier banks catering to the need of low income segments of the society with no access to commercial banks. It is also hoped that financial inclusion will reduce the size of undocumented/informal economy. According to the Asian Development Bank (ADB) the estimated informal economy in Pakistan is over 1/3 of the formal economy which is quite satisfactory.

The Pakistan's Finance Minister launched National Financial Inclusion Strategy (NFIS) 2015-20 for Pakistan. The objective of the strategy is to build momentum and push forward the reforms to achieve the universal financial inclusion in an integrated and sustained manner. The financial inclusion started functioning as a branch of National Financial Inclusion Strategy (NFIS) for Pakistan, at Islamabad. It has been emphasized that government is working hard to create opportunities for common and poor population of the country to enter small business activities and become self-reliant and economically empowered. Thus, through access and quality of financial services to the underserved segments of the economy a sustainable and prosperous Pakistan will be built.

Pakistan has now been one of the pioneers in introducing financial inclusions for over a decade. The major achievement in this regard is the establishment of a regulatory framework for Microfinance Banks in 2001. The expansion and modernization of online Credit Information Bureau (e CIB) in 2000 and the adoption of Branchless Banking Regulations has allowed a tiered approach to know-your-customer (KYC) requirements in 2008. The launch of Financial Inclusion Program with the support of DFID, include risk sharing initiatives and smart grant facilities for capacity development, innovation and market infrastructure development in 2008. The specialized Microfinance Credit Information Bureau (m-CIB) was established in 2009 and the branch of nation-wide Financial Literacy Program in 2012.

Despite the above mentioned efforts made by the government with the partnership of SBP the level of financial inclusion remained very low. Some reasons have been mentioned earlier above in the discussion, such as the reliance of the poor on informal money lenders due to less time consuming and cost.

Therefore, the NFIS stressed the need of a platform of government, the SBP and the private sector; to adopt and implement a comprehensive set of coherent and sequential reforms needed to influence the financial inclusion in a big way. The objectives and targets have to be fixed and achieved. According to the Deputy Governor of State Bank, almost 80 per cent of the entire population is financially excluded with no access to financial services, such as, savings, payments, deposits and credits, in financial inclusion is a priority area for government and the SBP.

Wide outreach of financial institutions is important for sustainability and financially inclusive growth. Microfinance did not achieve the thought targets fully

and that is why the extensions with inclusive finance are on the way. Thus, with microloans, and microfinance schemes, there is a dire need to mobilize indigenous resources, and branchless banking is to be made accessible to greater part of the country. Financial innovations and financial literacy programs should be launched in all rural area of Pakistan. It is also important and critical to arrange free of cost financial literacy courses for migrant workers heading abroad for work before their departure.

In Pakistan, according to one research estimate by the World Bank the financial inclusion rate is close to 15 per cent. Since Pakistan's financial sector has always been conservative, hence, its outreach of financial services is also very limited to the low income groups and the marginalized segments of the society.

During the year 2012 Pakistan was far behind its SAARC allies e.g., India, Nepal, Sri Lanka and Bangladesh. India has improved a lot in the field of financial inclusion. Today nobody can even think of remitting via informal means; whereas the process of inclusive finance in Pakistan has been slow and not as active as in India. As in our neighboring countries, our civil societies, commercial banks must play an active role in order to improve the access of financial inclusion in rural areas of the country.

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Bibliography

Building inclusive financial system in Pakistan, 2007, Shamshad Akhtar, Governor, SBP, DFID and HM Treasury, Financial Inclusion Conference, London, UK, June.

Kamil Khan, 2013, The Nation, December 15.

Microfinance trajectory will help achieve financial inclusion for all, Vision: SBP, March 1.

Prime Minister launches NFIS for Pakistan, 2013, The Frontier Post, March 23.

The development of India's financial agenda – Some lessons from Pakistan, 2002, Muneeb Hussain Gatteo, S.M. Jawed Akhtar.